

In the Claims:

1. (Currently Amended) A die bonder which mounts on a base, piece by piece, dies, each having a surface on which a semiconductor device is formed, the die bonder comprising:
a laser machining part which causes laser light to become incident from a surface of a wafer before dividing into individual dies so that the laser light forms a modified region within the wafer,

wherein the wafer is divided into individual dies in the laser machining part; and,
an expanding part that widens a gap between the individual dies after the laser light forms the modified region within the wafer, said expanding part comprising an expanding stage having a frame with a chamfered top edge portion at an outer peripheral side thereof which engages an expandable wafer tape on which the wafer is supported, the chamfered top edge portion having a chamfer with circular arc-shaped form.

2. (Original) The die bonder as defined in claim 1, wherein a product type marking is provided on a surface of the die by the laser machining part.

3. (Original) The die bonder as defined in claim 1, wherein all dies on the wafer are divided into the individual dies by the laser machining part.

4. (Original) The die bonder as defined in claim 3, wherein a product type marking is provided on a surface of the die by the laser machining part.

5. (Original) The die bonder as defined in claim 1, wherein only conforming dies on the wafer are divided into the individual dies by the laser machining part.

6. (Original) The die bonder as defined in claim 5, wherein a product type marking is provided on a surface of the die by the laser machining part.

7. (Previously Presented) The die bonder as defined in claim 1, wherein the expanding stage supports the wafer during application of the laser light and supports the wafer during pickup of the individual dies for mounting on the base.

8. (Previously Presented) The die bonder as defined in claim 7, wherein the expandable wafer tape is mounted on said frame, and wherein the expandable wafer tape is positioned on the expanding stage.

9. (Previously Presented) The die bonder as defined in claim 8, wherein the expanding part further includes a frame pusher that moves the frame relative to the expanding stage to cause the expandable wafer tape to expand and widen the gap between the individual dies.

10. (Canceled)

11. (Previously Presented) The die bonder as defined in claim 1, further comprising a pushup device that cooperates with the expanding part to selectively push up an individual die.

12. (Previously Presented) The die bonder as defined in claim 11, wherein the pushup device includes a movable needle.

13. (Previously Presented) The die bonder as defined in claim 11, further comprising a bonding part that includes a collet that picks up the individual die that is pushed up by the pushup device.

14. (Previously Presented) The die bonder as defined in claim 1, further comprising a bonding part that includes a collet that selectively holds an individual die for mounting on the base.

15. (Previously Presented) The die bonder as defined in claim 14, wherein the collet holds the individual die by suction.

16. (New). The die bonder as defined in claim 1, wherein the frame is annular.

17. (New) The die bonder as defined in claim 1, further comprising a pushup device for selectively pushing up an individual die at a location inward of said annular frame.

18. (New) The die bonder as defined in claim 16, wherein the expanding part further includes a frame pusher that moves relative to the expanding stage to cause the expandable wafer tape to expand and widen the gap between the individual dies, the frame pusher is located radially outward of the annular frame of the expanding stage.

19. (New) The die bonder as defined in claim 18, further comprising a pushup device for selectively pushing up an individual die, the pushup device being located radially inward of said annular frame.